

10/15/01  
1036 U.S. PTO

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10-16-01

PTO/SB/05 (11-00)

Approved for use through 10/31/2002. OMB 0651-0032  
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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# UTILITY PATENT APPLICATION TRANSMITTAL

(Only for new nonprovisional applications under 37 C.F.R. 1.53(b))

Attorney Docket No.		7000-103
First Inventor		Tarokh, Vahid
Title	EFFICIENT OFDM COMMUNICATIONS WITH INTERFERENCE IMMUNITY	
Express Mail Label No.		EL873243331US

1036 U.S. PTO  
09/977540  
10/15/01

## APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

1. ☒ Fee Transmittal Form (e.g., PTO/SB/17)  
(Submit an original and a duplicate for fee processing)
2. ☐ Applicant claims small entity status.  
See 37 CFR 1.27.
3. ☒ Specification [Total Pages **26**]  
(preferred arrangement set forth below)
  - Descriptive title of the Invention
  - Cross References to Related Applications
  - Statement Regarding Fed sponsored R & D
  - Reference to sequence listing, a table, or a computer program listing appendix
  - Background of the Invention
  - Brief Summary of the Invention
  - Brief Description of the Drawings (if filed)
  - Detailed Description
  - Claim(s)
  - Abstract of the Disclosure
4. ☒ Drawing(s) (35 U.S.C. 113) [Total Sheets **3 sets of 5**]
5. Oath or Declaration [Total Pages **3**]
  - a. ☒ Newly executed (original or copy)
  - b. ☐ Copy from a prior application (37 CFR 1.63 (d))  
(for a continuation/divisional with Box 18 completed)
  - i. ☐ **DELETION OF INVENTOR(S)**  
Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).
6. ☐ Application Data Sheet. See 37 CFR 1.76

## ADDRESS TO:

Assistant Commissioner for Patents  
Box Patent Application  
Washington, DC 20231

## ACCOMPANYING APPLICATIONS PARTS

7. ☐ CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix)
8. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary)
  - a. ☐ Computer Readable Form (CRF)
  - b. Specification Sequence Listing on:
    - i. ☐ CD-ROM or CD-R (2 copies); or
    - ii. ☐ paper
  - c. ☐ Statements verifying identity of above copies
9. ☒ Assignment Papers (cover sheet & document(s))
10. ☒ 37 C.F.R. §3.73(b) Statement ☒ Power of Attorney  
(when there is an assignee)
11. ☐ English Translation Document (if applicable)
12. ☒ Information Disclosure Statement (IDS)/PTO-1449 ☒ Copies of IDS Citations
13. ☐ Preliminary Amendment
14. ☒ Return Receipt Postcard (MPEP 503)  
(Should be specifically itemized)
15. ☐ Certified Copy of Priority Document(s)  
(if foreign priority is claimed)
16. ☐ Request and Certification under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.
17. ☐ Other: \_\_\_\_\_

18. If a **CONTINUING APPLICATION**, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:

☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No: \_\_\_\_\_ / \_\_\_\_\_  
Prior application information: Examiner \_\_\_\_\_ Group / Art Unit: \_\_\_\_\_

For **CONTINUATION** or **DIVISIONAL APPS** only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

## 17. CORRESPONDENCE ADDRESS

☒ Customer Number or Bar Code Label **27820** or ☐ Correspondence address below  
(Insert Customer Number or Bar Code Label here)

Name	27820			
Address	PATENT TRADEMARK OFFICE			
City	State	Zip Code		
Country	Telephone	Fax		

Name (Print/Type)	Benjamin S. Withrow	Registration No. (Attorney/Agent)	40,876
Signature	<i>[Signature]</i>	Date	October 15, 2001

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*Patent fees are subject to annual revision.*

**Complete if Known**

Application Number

October 15, 2001

First Named Inventor

Tarokh, Vahid

Examiner Name

Group / Art Unit

<b>TOTAL AMOUNT OF PAYMENT</b>	<b>(\$)</b>	<b>1134</b>
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Attorney Docket No. 7000-103

**METHOD OF PAYMENT (check one)**

1. ☒ The Commissioner is hereby authorized to charge indicated fees and credit any over payments to:

50-1732

Withrow &amp; Terranova, P.L.L.C.

☒ Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17

☐ Applicant claims small entity status. See 37 CFR 1.27

2. ☒ Payment Enclosed:

☐ Check    ☒ Credit card    ☐ Money Order    ☐ Other

### FEE CALCULATION

1. BASIC FILING FEE

Large	Entity	Small	Entity	
Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description
101	710	201	355	Utility filing fee
106	320	206	160	Design filing fee
107	490	207	245	Plant filing fee
108	710	208	355	Reissue filing fee
114	150	214	75	Provisional filing fee

SUBTOTAL (1)

(S) 710

## 2. EXTRA CLAIM FEES

			Extra Claims		Fee from below		Fee Paid
Total Claims	28	-20**	= 8	X	18	=	144
Independent Claims	6	-3**	= 3	X	80	=	240
Multiple Dependent				X		=	0

Large Fee Code	Entity Fee (\$)	Small Fee Code	Entity Fee (\$)	Fee Description
103	18	203	9	Claims in excess of 20
102	80	202	40	Independent claims in excess of 3
104	270	204	135	Multiple dependent claim, if not paid
109	80	209	40	** Reissue independent claims over original patent
110	18	210	9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2)	(\$)	384
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\*\*or number previously paid, if greater; For Reissues, see above

**FEE CALCULATION (continued)**

### 3. ADDITIONAL FEES

	Large Entity		Small Entity	
Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description
105	130	205	65	Surcharge - late filing fee or oath
127	50	227	25	Surcharge - late provisional filing fee or cover sheet.
139	130	139	130	Non-English specification
147	2,520	147	2,520	For filing a request for reexamination
112	920*	112	920*	Requesting publication of SIR prior to Examiner action
113	1,840*	113	1,840*	Requesting publication of SIR after Examiner action
115	110	215	55	Extension for reply within first month
116	390	216	195	Extension for reply within second month
117	890	217	445	Extension for reply within third month
118	1,390	218	695	Extension for reply within fourth month
128	1,890	228	945	Extension for reply within fifth month
119	310	219	155	Notice of Appeal
120	310	220	155	Filing a brief in support of an appeal
121	270	221	135	Request for oral hearing
138	1,510	138	1,510	Petition to institute a public use proceeding
140	110	240	55	Petition to revive – unavoidable
141	1,240	241	620	Petition to revive – unintentional
142	1,240	242	620	Utility issue fee (or reissue)
143	440	243	220	Design issue fee
144	600	244	300	Plant issue fee
122	130	122	130	Petitions to the Commissioner
123	50	123	50	Petitions related to provisional applications
126	180	126	180	Submission of Information Disclosure Stmt
581	40	581	40	Recording each patent assignment per property (times number of properties)
146	710	246	355	Filing a submission after final rejection (37 CFR § 1.129(a))
149	710	249	355	For each additional invention to be examined (37 CFR § 1.129(b))
179	710	279	355	Request for Continued Examination (RCE)
169	900	169	900	Request for expedited examination of a design application

Other fee (specify)

\*Reduced by Basic Filing Fee Paid

SUBTOTAL (3)	(\$ ) 40
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## SUBMITTED BY

Name (Print/Type)

Benjamin S. ~~With~~row

Registration No. Attorney/Agent)

40.878

Telephone \_\_\_\_\_

919-654-4520

*Signature*

Date \_\_\_\_\_

October 15, 2001

**WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.**

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents  
Box PATENT APPLICATION  
Washington, D.C. 20231

Sir:

CERTIFICATE OF MAILING/EXPRESS MAIL

"Express Mail" Mailing Label Number EL873243331US

Date of Deposit October 15, 2001

I hereby certify that this paper, which is a Utility Patent Application entitled  
**EFFICIENT OFDM COMMUNICATIONS WITH INTERFERENCE IMMUNITY** (our  
file 7000-103), and the attached fee are being deposited with the United States Postal Service  
"Express Mail Post Office to Addressee" service under 37 C.F.R. 1.10 on the date indicated  
above and is addressed to the Commissioner for Patents, Box Patent Application, Washington,  
D.C. 20231.

Mailed By:

  
Jennifer Rush

EL873243331US

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